

# Comparisons of Job Characteristics

**Focus Occupation:** Database Administrators (15-1061)

**Associated Occupation:** Computer and Information Scientists, Research (15-1011)

[Compare Knowledge](#)

[Compare Skills](#)

[Compare Abilities](#)

[Compare Detailed Work Activities](#)

[Compare Tools and Technologies](#)

|    |  |
|----|--|
| << | Focus occupation element is much lower             |
| <  | Focus occupation element is lower                  |
| 0  | Focus occupation element is at a similar level     |
| >  | Focus occupation element is at a higher level      |
| >> | Focus occupation element is at a much higher level |

## Knowledge

Similarity of Focus Occupation to Associated Occupation: 86

**Focus Occupation:** Database Administrators (15-1061)

**Associated Occupation:** Computer and Information Scientists, Research (15-1011)

| Associated Occupation's Key Knowledge Elements | Average Rating, All Occupations | Associated Occupation's Rating | Focus Occupation's Rating | Evaluation of Focus Occupation |   |
|--|---------------------------------|--------------------------------|---------------------------|--------------------------------|---|
| Computers and Electronics                      | 8.4                             | 22.8                           | 19.9                      | <                              | Expanded education and/or training may be required  |
| Mathematics                                    | 9.2                             | 18.3                           | 11.4                      | <<                             | Extensive education and/or training may be required |
| Education and Training                         | 9.2                             | 16.8                           | 7.4                       | <<                             | Extensive education and/or training may be required |
| English Language                               | 11.2                            | 16.6                           | 10.5                      | <<                             | Extensive education and/or training may be required |
| Engineering and Technology                     | 5.7                             | 12.0                           | 8.5                       | <<                             | Extensive education and/or training may be required |
| Telecommunications                             | 3.9                             | 11.9                           | 7.3                       | <<                             | Extensive education and/or training may be required |
| Design   | 5.2                             | 11.4                           | 6.4                       | <<                             | Extensive education and/or training may be required |

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

## Skills

Similarity of Focus Occupation to Associated Occupation: 86

**Focus Occupation:** Database Administrators (15-1061)

**Associated Occupation:** Computer and Information Scientists, Research (15-1011)

| Associated Occupation's Key Skills Elements | Average Rating, All Occupations | Associated Occupation's Rating | Focus Occupation's Rating | Evaluation of Focus Occupation |  |
|---|---------------------------------|--------------------------------|---------------------------|--------------------------------|--|
| Systems Evaluation                          | 6.4                             | 14.7                           | 10.4                      | <<                             | Extensive development of skills in this area may be required |
| Systems Analysis                            | 6.5                             | 13.6                           | 10.6                      | <<                             | Extensive development of skills in this area may be required |
| Programming                                 | 2.2                             | 12.4                           | 9.9                       | <                              | A higher skill level may be required                         |

|                                   |     |      |     |    |  |
|-----------------------------------|-----|------|-----|----|--|
| Time Management                   | 8.9 | 12.2 | 9.7 | <  | A higher skill level may be required                         |
| Mathematics                       | 6.2 | 11.3 | 8.9 | <  | A higher skill level may be required                         |
| Operations Analysis               | 5.0 | 10.6 | 9.6 | <  | A higher skill level may be required                         |
| Technology Design                 | 2.6 | 10.0 | 6.1 | << | Extensive development of skills in this area may be required |
| Management of Financial Resources | 3.3 | 7.8  | 5.8 | << | Extensive development of skills in this area may be required |

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

## Abilities

Similarity of Focus Occupation to Associated Occupation: 98

Focus Occupation: Database Administrators (15-1061)

Associated Occupation: Computer and Information Scientists, Research (15-1011)

| Associated Occupation's Key Abilities Elements | Average Rating, All Occupations | Associated Occupation's Rating | Focus Occupation's Rating |    | Evaluation of Focus Occupation                     |
|--|---------------------------------|--------------------------------|---------------------------|----|--|
| Deductive Reasoning                            | 10.6                            | 14.6                           | 11.6                      | <  | Some improvement in abilities may be required      |
| Inductive Reasoning                            | 10.2                            | 14.1                           | 11.1                      | << | Extensive improvement in abilities may be required |
| Problem Sensitivity                            | 11.1                            | 13.9                           | 12.5                      | <  | Some improvement in abilities may be required      |
| Fluency of Ideas                               | 7.6                             | 12.8                           | 9.9                       | << | Extensive improvement in abilities may be required |
| Information Ordering                           | 9.9                             | 12.6                           | 12.3                      | 0  | Current ability level may be sufficient            |
| Category Flexibility                           | 9.0                             | 12.4                           | 11.0                      | <  | Some improvement in abilities may be required      |
| Originality                                    | 7.6                             | 11.0                           | 9.8                       | <  | Some improvement in abilities may be required      |
| Mathematical Reasoning                         | 6.3                             | 10.8                           | 9.7                       | <  | Some improvement in abilities may be required      |
| Number Facility                                | 6.3                             | 9.8                            | 8.9                       | <  | Some improvement in abilities may be required      |

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

## Activities that Both Occupations Have in Common

Similarity of Focus Occupation to Associated Occupation: 91

Focus Occupation: Database Administrators (15-1061)

Associated Occupation: Computer and Information Scientists, Research (15-1011)

| Work Activities                        | Exclusivity of Activity |
|--|-------------------------|
| Communicate technical information      | 4                       |
| Design data security systems           | 89                      |
| Develop mathematical simulation models | 70                      |
| Develop or maintain databases          | 30                      |

|   |    |
|---|----|
| Develop tables depicting data   | 33 |
| Follow data security procedures   | 77 |
| Follow data storage procedures  | 75 |
| Program mainframe computer  | 84 |
| Provide technical computer training                                     | 82 |
| Test computer programs or systems                                       | 78 |
| Use computer application flow charts                                    | 84 |
| Use computer networking technology                                      | 81 |
| Use computer programming language                                       | 82 |
| Use computers to enter, access or retrieve data                         | 3  |
| Use geographical information system (GIS) software                      | 72 |
| Use interpersonal communication techniques                              | 10 |
| Use knowledge of mainframe computers                                    | 78 |
| Use mathematical or statistical methods to identify or analyze problems | 30 |
| Use object-oriented computer programming techniques                     | 85 |
| Use project management techniques                                       | 47 |
| Use relational database software  | 26 |
| Use spreadsheet software  | 18 |
| Use structural analysis techniques to analyze computer systems          | 89 |
| Use word processing or desktop publishing software                      | 17 |
| Work as a team member   | 36 |
| Write computer software, programs, or code                              | 84 |
| Write documentation for computer programming                            | 87 |

Not all positions in these occupations will necessarily perform all of the listed activities. The exclusivity rating is an indication of how unique the activity is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations engage in that activity.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

## Tools and Technologies that Both Occupations Have in Common

Similarity of Focus  
Occupation to Associated  
Occupation: 92

**Focus Occupation: Database Administrators (15-1061)**

**Associated Occupation: Computer and Information Scientists, Research (15-1011)**

| Tools and Technologies                 | Exclusivity |
|--|-------------|
| Computers                              | 1           |
| Content authoring and editing software | 1           |
| Data management and query software     | 1           |
| Development software                   | 4           |
| Industry specific software             | 1           |
| Media storage devices                  | 21          |
| Operating environment software         | 12          |

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.